

METHOD AND APPARATUS FOR DUAL-ENERGY E-BEAM INSPECTOR

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Abstract of the Disclosure

In accordance with one embodiment, the disclosure pertains to an apparatus for inspection of substrates. The apparatus includes at least a dual-energy e-beam source, an energy-dependent dispersive device, a beam separator, and an objective lens. The dual-energy e-beam source is configured to generate both a higher-energy e-beam component and a lower-energy e-beam component. Said two components exit the dual-energy e-source co-axially. The energy-dispersive device is configured to introduce dispersion between the two components. The components exit the dispersive device at different angles of trajectory. The beam separator is configured to receive the two dispersed components and substantially cancel the dispersion previously introduced by the dispersive device. As a result, the two components are rejoined in trajectory. Finally, the objective lens configured to focus said two rejoined components onto an area of the substrate.

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